



## INTEGRAL/JEM-X reports enhanced activity from the HMXB 4U 1036-56

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## INTEGRAL/JEM-X reports enhanced activity from the HMXB 4U 1036-56

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*on 17 Dec 2015; 11:42 UT*

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During the Galactic Plane Scanning performed by INTEGRAL on December 11th, 2015, the X-ray monitor JEM-X has detected enhanced activity from the high mass X-ray binary (HMXB) 4U 1036-56, aka RX J1037.5-5647. The position of the source was covered by the JEM-X field of view two times between UTC 6:55 and 12:38. The source was only detected at  $4\sigma$  between 3-10 keV for a total effective exposure of 2.7 ks in the combined JEMX-1+2 mosaic.

The averaged 3-10 keV flux was  $5.2 \pm 1.5$  mCrab, which, at the 5 kpc source distance (Motch et al. 1997, A&A 323, 853), leads to a luminosity of about  $2.7 \times 10^{35}$  erg/s. We derive a  $5\sigma$  upper limit of 2 mCrab between 10-25 keV. The source was not detected by IBIS/ISGRI with an exposure of 4 ks leading to a  $3\sigma$  upper limit of 6 mCrab in the band 22-60 keV.

The source was not detected at all the last time its position was observed by INTEGRAL on November 23rd, 2015.

4U 1036-56 is a Be X-ray pulsar (e.g. Torres et al. 2012, ApJ 761, 49), whose last outburst was reported by Swift in February 2012 (Krimm et al. ATel #[3936](#)).

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